

Crambus faunellus Schaus, new species.

"Fore wing straw yellow, shaded slightly with brown towards inner margin; veins faintly bordered with brown on each side; a brown discal dot, one below on vein 2 and a slight one at anal angle. A row of terminal black dots between the veins. Hind wings slightly shaded with brown except along costa; fringe pale on both wings. Expanse, 31 mm.

Sao Paulo, Brazil." Schaus, MS.

Type, No. 13625, U. S. National Museum.

The front is smooth, antennae of the male slightly thickened and flattened, fore wing with vein 7 given off further from the apex than 9, 11 curved and approximated to 12, 4 and 5 stalked. This brings it in the group with *distictellus* Hampson, than which it is much larger and has a terminal row of black dots on fore wing. I mention this species here because the females were included under *Diatraea lineolata* in the collection, to which they bear a strong superficial resemblance. They differ from the male only in having the wing slightly more pointed, the linings along the veins a little more distinct, while the spots are less distinct, and the hind wings are paler, being a slightly soiled white.

A Supposed Occurrence of *Anagrus incarnatus* Haliday in the United States (Hym.).

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Sometime during 1909 I received from Professor C. P. Gillette, of the Colorado Agricultural College, a slide bearing single specimens of both sexes of a species of *Anagrus* Haliday, with the request that I identify it if possible. The slide was labelled "probably from eggs of *Aphis pomi*." Soon after its receipt I examined the specimens and decided that they could not be separated from *Anagrus incarnatus* Haliday, specimens of which I have as a loan through the ready kindness of Dr. L. O. Howard. Subsequently, however, a more careful comparison showed differences of such character as to preclude the sameness of the two sets of specimens and the Colorado specimens are therefore representatives of an undescribed species. At the present time Mymarids of the Euro-

pean fauna do not occur in this country; that is to say so far as is known. Species of *Anagrus* are common here as are also species of other common genera but I have never met with a specimen which was similar to any of the European specimens in my possession.*

The new North American species which I shall call *Anagrus spiritus* is similar in all details of body structure, color, antennae and wing ciliation to *incarnatus* but differs in the following particulars: The marginal cilia of the posterior wings at the caudal margin are very long, the longest being seven or eight times longer than the greatest width of the wing blade, distinctly longer than in *incarnatus*—in that species only four or five times longer than the greatest width of the wing blade; otherwise the posterior wings are alike in both species. In the American species the parapsidal furrows are farther apart, in other words the mesoscutum is broader, much broader cephalad than its width at the caudal margin, the parapsidal furrows curving cephalo-laterad; in *incarnatus* the parapsidal furrows are but slightly curved cephalo-laterad, comparatively straight, consequently the mesoscutum is nearly rectangular but slightly broader at the cephalic margin than it is broad at the caudal margin and distinctly longer than wide, wedge-shaped. In *spiritus* it is only slightly longer than its greatest width, its caudal margin curved, its shape peltate. In *incarnatus* the caudal margin of this sclerite is nearly straight, slightly concaved. The fore wings in both species are nearly identical in shape, yet in *spiritus* they are slightly broader at the apex, with the tendency to bear one more line of discal ciliation (7 or 8 lines) and with longer marginal cilia. The antennae in both are very much alike, yet in the female the joints though similar in shape, yet are shorter in *spiritus* than in *incarnatus*, so that the sixth funicle joint is barely longer than the first; whereas in *incarnatus* it is distinctly longer than

*I may add that the differences between the species of *Anagrus* are more subtle than those met with in any other group; they are distinct enough when once seen.

the first funicle joint by at least a fourth. In *spiritus* the cephalic femora are slightly longer and broader than in the other species, as long as the cephalic tibiae. There are no colorational differences between the two species, excepting that in *incarnatus* (female only) the pedicel and first funicle joint of the antenna are pallid (white, clear), not so in *spiritus*. The species is described more in detail herewith.

Anagrus spiritus species nova.

Female:—Length, 0.65 mm.; moderately small for the family, usual in size for the genus.

General color yellowish brown (brown pink) suffused with some dusky, the abdomen with 4 or 5 transverse dusky bands across it which are not conspicuous; all appendages pallid brownish as is also the venation; the trochanters and knees pallid, the wings hyaline excepting the fore wings proximad which are suffused with dusky out as far a distance distad of the apex of the marginal vein as the latter is long, the fumation more noticeable caudad of the marginal vein. Eyes and ocelli ruby red.

Carina on the vertex present, usual; eyes reniform; abdomen slightly longer than the thorax, pointed but not noticeably or pronouncedly so.

Fore wings moderately slender, clavate, curved at about the distal third, with very long marginal cilia, the longest about twice longer than the greatest wing width (some distance back from the apex), shortening abruptly along both margins proximad of the distal third, there half shorter and from thence proximad more gradually shortening. Discal ciliation of the fore wing arranged across the widest part in about 6 longitudinal rows and between the fifth and sixth row in that part of the blade is a narrow, long elliptical bare space. Marginal vein about four and a half times longer than wide, terminating in a blunt point away from the cephalic margin and bearing three long setae. Dilatation of the fore wing caudad near base conspicuous, opposite the marginal vein. Posterior wings without discal ciliation excepting the paired row along each edge arising from between the bases of the marginal cilia.

Tibial spurs short, straight, single; none of the four tarsal joints are long; cephalic tibial spurs usual, that is longer, curved, forked at tip forming the usual strigil. Valves of ovipositor distinctly projecting a short distance beyond the end of the abdomen.

Antennae 9-jointed; scape one and a half times longer than the ped-

the first funicle joint. The latter obconic, very much larger than the length of the second. The latter nearly globular, small, only a third the length of the first funicle; funicle 3 slightly longer than the preceding, 4 still somewhat shorter but wide ovate, as long as the subequal, slightly longer than the preceding. Club longer than the scape. Combined lengths of funicle joints 5 and 6, long optic, Bausch and Lomb). (From 1 specimen, two-thirds inch objective, 1-inch objective, tip.

Male:—The same but the abdomen is blunt at tip. flagellum gradually lengthening distad but funicle 1 is a third shorter than funicle 2; funicle 2 to 5 subequal; 6 to 9 subequal, slightly longer than the preceding. The first funicle joint, equal, very slightly longer; pedicel shorter than the flagellum.

(From 2 specimens, the same objective and optic specimens, a pair mounted on a slide. Described from two male and one female mounted on a slide. The first received from Professor C. P. Gillette. Probable source: single slide labelled "Parasites found on apple twigs. The third specimen from eggs of *Aphis pomi*, 1904, S. A. J. Felt, of the New York State Museum, Albany, N. Y. A male, was received from Dr. E. P. Felt of New York, also mounted on a slide labelled, "a 1456, E. P. Felt, New York (E. Schodack), 24, Apr., 1907."

Habitat: United States—Colorado, New York (E. Schodack), New York State Laboratory of Entomology, Albany, N. Y.

Types: Accession No. 40,809, Illinois State Natural History, Urbana, Illinois, one male and one female—Cotype No. 13,650, mounted on a single slide in balsam. Washington, D. C., one male on a slide in balsam (New York). (From 1 specimen, two-thirds inch objective, 1-inch objective, tip.)

This species is distinguished from the genus as I find them in Illinois by its unusually long cilia on the wings and the finer, more delicate ciliation of the wings and the finer, more delicate ciliation.

Postscript: Dr. E. P. Felt has stated in a letter that the male specimen received from him, as previously written above, was reared from the galls of *Dasynotus* (New York, March 20, 1907), taken on alder at East Schodack, New York, following the parasites emerging the 24th of April 1907.